

identical to a sequence selected from: (a) a NS encoding a polypeptide comprising amino acids (aa) from -32, -31 or 1 to 365 of the 397 sequence given in the specification shown; (b) a NS encoding a polypeptide having an aa sequence encoded by a cDNA clone contained in ATCC 97729; and (c) a NS complementary to any of the NSs in (a)-(c).

Also claimed are: (1) an isolated NAM comprising a PN which encodes an amino acid sequence of an epitope-bearing portion of a cardiac and pancreatic protein (CAPP) polypeptide having an amino acid sequence as in (a)-(b) above; (2) an isolated NAM, comprising a PN having a sequence selected from: (a) a NS of a fragment of a sequence shown, where the fragment comprises at least 50 contiguous nucleotides of the sequence shown; and (b) a NS complementary to a NS as in (a); (3) a method for making a recombinant vector comprising inserting (I) into a vector; (4) a recombinant vector produced by a method as in (3); (5) a method of making a recombinant host cell comprising introducing a recombinant vector as in (4) into a host cell; (6) a recombinant host cell produced by a method as in (5); (7) an isolated CAPP polypeptide having an amino acid sequence at least 95% identical to a sequence selected from: (a) amino acids from -32 to 365, -31 to 365, or 1 to 365 of a sequence shown; (b) an amino acid sequence of a CAPP polypeptide having an amino acid sequence encoded by the cDNA clones contained in ATCC 97729; and (c) an amino acid sequence of an epitope-bearing portion of any one of the polypeptides as in (a) or (b); (8) an isolated antibody that binds specifically to a CAPP polypeptide as in (7); (9) an isolated NAM comprising a PN encoding a CAPP polypeptide, where, except for 1-50 conservative amino acid substitutions, the polypeptide has a sequence selected from sequences of (I); (10) an isolated CAPP polypeptide where, except for at least one conservative amino acid substitution, the polypeptide has a sequence selected from (a)-(c) as in (7); (11) an isolated antibody that binds specifically to a CAPP polypeptide as in (10).

USE - The CAPP polypeptides can modulate the differentiation and proliferation of cells and tissue, both in vivo and ex vivo. The products can be used in the diagnosis and treatment of pancreatitis and conditions that cause abnormal hypertrophy of the heart, such as hypertension, myocardial infarction, valve disease and cardiomyopathy. The products can also be used in detection and cell culturing.

Dwg.0/5

Derwent Class: B04; D16; S03

International Patent Class (Main): C12N-015/12

International Patent Class (Additional): A61K-038/18; C07K-014/475;

C07K-016/22; C12Q-001/68; G01N-033/68

?s pn=ca 2255109

S2 1 PN=CA 2255109

?t s2/7/1

2/7/1

DIALOG(R)File 352:DERWENT WPI

(c) 2000 Derwent Info Ltd. All rts. reserv.

012976233

WPI Acc No: 2000-148082/200014

New nucleic acids encoding a murine and human Brainiac protein, useful for detecting somatic or germline DNA lesions which are responsible for developmental syndromes or diseases including cancer

Patent Assignee: HSC RES & DEV LP (HSCR-N)

Inventor: EGAN S E

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
CA 2255109	A1	19990617	CA 2255109	A	19981217	200014 B

Seq	21位	92%
" 2	7位	X
" 3	7位	X
4	6位	X

Priority Applications (No Type): CA 2225126 A 19971217

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes  
CA 2255109 A1 E 40 C12N-015/12

Abstract (Basic): CA 2255109 A1

NOVELTY - An isolated nucleic acid (I) comprising a nucleotide sequence encoding a mammalian Brainiac protein, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) an isolated polynucleotide selected from at least 10, 15 or 20 consecutive nucleotides of (I);

(2) a recombinant vector comprising (I);

(3) a host cell comprising the vector of (2);

(4) a pure mammalian Brainiac protein;

(5) a pure polypeptide comprising an amino acid sequence selected from at least 5, 10 or 15 consecutive amino acid residues of the protein of (4);

(6) a mammalian Brainiac protein that is at least 80% identical to the two 397 (IIa and IIb) amino acid sequences given in the specification;

(7) a method for producing a mammalian Brainiac protein comprises culturing the host cell of (3) under suitable expression conditions;

(8) a non-human transgenic animal comprising (I) which codes for the human Brainiac protein;

(9) a purified antibody that specifically binds a mammalian Brainiac protein;

(10) a hybridoma cell line that produces the antibody of (9);

(11) a method of screening candidate compounds to identify compound which can selectively bind mammalian Brainiac proteins comprising:

(a) providing a preparation including at least one mammalian Brainiac protein;

(b) contacting the preparation with the candidate compound; and

(c) determining binding of the Brainiac protein to the compound;

and

(12) a method of identifying compounds which modulate the expression of a mammalian Brainiac gene comprising:

(a) contacting a cell with a candidate compound where the cell includes a regulator of a Brainiac gene operably joined to a coding region; and

(b) detecting a change in expression of the coding region.

ACTIVITY - None given.

MECHANISM OF ACTION - None given.

USE - The mammalian Brainiac proteins can be administered to patients who are deficient in Brainiac proteins (claimed).

The nucleic acids encoding the mammalian Brainiac protein may be used to detect somatic or germline DNA lesions which are responsible for developmental syndromes or diseases including cancer. The mammalian Brainiac proteins and fragments or its analogues are useful as antigens in immunoassays including enzyme-linked immunosorbent assays (ELISA), radioimmunoassays (RIA) and other non-enzyme linked antibody binding assays. The non-human transgenic animals can be used as animal models for the study of the mammalian Brainiac gene function, for the screening of candidate compounds and for the evaluation of potential therapeutic interventions.

pp; 40 DwgNo 0/0

Derwent Class: B04; D16; P14; S03

International Patent Class (Main): C12N-015/12

International Patent Class (Additional): A01K-067/027; A61K-038/17;

C07K-014/47; C07K-016/18; C12N-005/16; C12Q-001/68; G01N-033/53

identical to a sequence selected from: (a) a NS encoding a polypeptide comprising amino acids (aa)s -32, -31 or 1 to 365 of the 397 aa sequence given in the specification shown; (b) a NS encoding a polypeptide having an aa sequence encoded by a cDNA clone contained in ATCC 97729; and (c) a NS complementary to any of the NSs in (a)-(c).

Also claimed are: (1) an isolated NAM comprising a PN which encodes an amino acid sequence of an epitope-bearing portion of a cardiac and pancreatic protein (CAPP) polypeptide having an amino acid sequence as in (a)-(b) above; (2) an isolated NAM, comprising a PN having a sequence selected from: (a) a NS of a fragment of a sequence shown, where the fragment comprises at least 50 contiguous nucleotides of the sequence shown; and (b) a NS complementary to a NS as in (a); (3) a method for making a recombinant vector comprising inserting (I) into a vector; (4) a recombinant vector produced by a method as in (3); (5) a method of making a recombinant host cell comprising introducing a recombinant vector as in (4) into a host cell; (6) a recombinant host cell produced by a method as in (5); (7) an isolated CAPP polypeptide having an amino acid sequence at least 95% identical to a sequence selected from: (a) amino acids from -32 to 365, -31 to 365, or 1 to 365 of a sequence shown; (b) an amino acid sequence of a CAPP polypeptide having an amino acid sequence encoded by the cDNA clones contained in ATCC 97729; and (c) an amino acid sequence of an epitope-bearing portion of any one of the polypeptides as in (a) or (b); (8) an isolated antibody that binds specifically to a CAPP polypeptide as in (7); (9) an isolated NAM comprising a PN encoding a CAPP polypeptide, where, except for 1-50 conservative amino acid substitutions, the polypeptide has a sequence selected from sequences of (I); (10) an isolated CAPP polypeptide where, except for at least one conservative amino acid substitution, the polypeptide has a sequence selected from (a)-(c) as in (7); (11) an isolated antibody that binds specifically to a CAPP polypeptide as in (10).

USE - The CAPP polypeptides can modulate the differentiation and proliferation of cells and tissue, both in vivo and ex vivo. The products can be used in the diagnosis and treatment of pancreatitis and conditions that cause abnormal hypertrophy of the heart, such as hypertension, myocardial infarction, valve disease and cardiomyopathy. The products can also be used in detection and cell culturing.

Dwg.0/5

Derwent Class: B04; D16; S03

International Patent Class (Main): C12N-015/12

International Patent Class (Additional): A61K-038/18; C07K-014/475;

C07K-016/22; C12Q-001/68; G01N-033/68

?s pn=ca 2255109

S2 1 PN=CA 2255109

?t s2/7/1

2/7/1

DIALOG(R)File 352:DERWENT WPI

(c) 2000 Derwent Info Ltd. All rts. reserv.

012976233

WPI Acc No: 2000-148082/200014

New nucleic acids encoding a murine and human Brainiac protein, useful for detecting somatic or germline DNA lesions which are responsible for developmental syndromes or diseases including cancer

Patent Assignee: HSC RES & DEV LP (HSCR-N)

Inventor: EGAN S E

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
CA 2255109	A1	19990617	CA 2255109	A	19981217	200014 B

Seq	1	214	92%
" 2	714	X	
" 3	714	X	
4	614	X	

Priority Applications (No Type D) CA 2225126 A 19971217  
Patent Details:  
Patent No Kind Lan Pg Main IPC Filing Notes  
CA 2255109 A1 E 40 C12N-015/12

Abstract (Basic): CA 2255109 A1

NOVELTY - An isolated nucleic acid (I) comprising a nucleotide sequence encoding a mammalian Brainiac protein, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) an isolated polynucleotide selected from at least 10, 15 or 20 consecutive nucleotides of (I);
- (2) a recombinant vector comprising (I);
- (3) a host cell comprising the vector of (2);
- (4) a pure mammalian Brainiac protein;
- (5) a pure polypeptide comprising an amino acid sequence selected from at least 5, 10 or 15 consecutive amino acid residues of the protein of (4);
- (6) a mammalian Brainiac protein that is at least 80% identical to the two 397 (IIa and IIb) amino acid sequences given in the specification;
- (7) a method for producing a mammalian Brainiac protein comprises culturing the host cell of (3) under suitable expression conditions;
- (8) a non-human transgenic animal comprising (I) which codes for the human Brainiac protein;
- (9) a purified antibody that specifically binds a mammalian Brainiac protein;
- (10) a hybridoma cell line that produces the antibody of (9);
- (11) a method of screening candidate compounds to identify compound which can selectively bind mammalian Brainiac proteins comprising:
  - (a) providing a preparation including at least one mammalian Brainiac protein;
  - (b) contacting the preparation with the candidate compound; and
  - (c) determining binding of the Brainiac protein to the compound;
- and
- (12) a method of identifying compounds which modulate the expression of a mammalian Brainiac gene comprising:
  - (a) contacting a cell with a candidate compound where the cell includes a regulator of a Brainiac gene operably joined to a coding region; and
  - (b) detecting a change in expression of the coding region.

ACTIVITY - None given.

MECHANISM OF ACTION - None given.

USE - The mammalian Brainiac proteins can be administered to patients who are deficient in Brainiac proteins (claimed).

The nucleic acids encoding the mammalian Brainiac protein may be used to detect somatic or germline DNA lesions which are responsible for developmental syndromes or diseases including cancer. The mammalian Brainiac proteins and fragments or its analogues are useful as antigens in immunoassays including enzyme-linked immunosorbent assays (ELISA), radioimmunoassays (RIA) and other non-enzyme linked antibody binding assays. The non-human transgenic animals can be used as animal models for the study of the mammalian Brainiac gene function, for the screening of candidate compounds and for the evaluation of potential therapeutic interventions.

pp; 40 DwgNo 0/0

Derwent Class: B04; D16; P14; S03

International Patent Class (Main): C12N-015/12

International Patent Class (Additional): A01K-067/027; A61K-038/17;

C07K-014/47; C07K-016/18; C12N-005/16; C12Q-001/68; G01N-033/53